

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-20. (Canceled)

21. (Previously Presented) A computer implemented method of formatting and transmitting an electronic transaction message between a user device and a transaction server system in a network including a plurality of different user devices communicating with the transaction server system to conduct different types of financial transactions requiring different information depending upon the type of electronic transaction, comprising:

identifying the type of electronic financial transaction based on a user's input to an input device;

selecting data fields required to transmit information necessary to conduct the transaction from a plurality of predetermined data fields used to transmit information for the different types of financial transactions;

determining a data format for the electronic transaction message between one of the user devices and an electronic transaction server that includes the selected data fields for information required to conduct the transaction, the transaction message including first and second message segments wherein the first message segment includes a data field for a code that uniquely identifies the user device from other user devices connected to the transaction server system and the second message segment includes data fields necessary to transmit the information required to conduct the financial transaction wherein the first message segment includes a data field for identifying the format of the second message segment;

transmitting the electronic transaction message from the input device to a transaction router;

electronically analyzing the electronic transaction message with the transaction router and forwarding the message to the incoming queue of a selected one of a plurality of enhanced service processors;

retrieving the electronic transaction message from the incoming queue of the selected

25 enhanced service processor;
communicating with an inter-process controller to determine a trace identification for the electronic transaction message;
accessing a codec module to decrypt transaction data in the electronic transaction message received from the input device;

30 formatting an authorization portion of the electronic transaction message;
communicating to a watchdog router the identity of a selected one of a plurality of authorization processors and a time out value for the electronic transaction, the watchdog router associating the time out value and trace identification with the electronic transaction message, the watchdog router communicating messages between the enhanced service processors and one

35 or more authorization processors;
forwarding the electronic message to an authorization processor;
reformatting, with the authorization processor, the electronic transaction message to a selected format required by a selected one of an authorizing financial network or cash switch;
forwarding the reformatted electronic transaction message to the selected one of the

40 authorizing financial network or cash switch;
receiving an authorization response from the selected one of the authorizing financial network or cash switch;
formatting the authorization response from the authorizing financial network or cash switch to the authorization information portion of the electronic transaction message;

45 communicating with the watchdog router with the response message from the selected one of the authorizing financial network or cash switch, the watchdog router verifying the time out value associated with the electronic transaction message and communicating the message to the response queue of the selected one of enhanced service processors;
retrieving the electronic transaction message from the response queue of the selected

50 enhanced service processor, the selected enhanced service processor verifying the authorization response;
formatting a response to the input device;
accessing the codec module to encrypt transaction data to be forwarded to the user input device;

55 forwarding the response from the enhanced processor to a response queue of the
transaction router;
retrieving the response with the transaction router;
forwarding the response to the input device; and
at least one of storing a record of the transaction in a database and printing a receipt for
60 the electronic transaction with the user input device.

22. (Previously Presented) The method of claim 21 wherein the electronic transaction message includes a terminal information segment, the method further comprising routing the electronic transaction message to a selected one of the enhanced service processors based on information in the terminal information segment.

23. (Previously Presented) The method of claim 21 wherein the first message segment includes a data field including routing information for routing the message in the network

24. (Previously Presented) The method of claim 21 further comprising formatting the electronic transaction message into an internal message format of the electronic transaction server after communicating with the inter-process controller to determine a trace identification for the electronic transaction message.

25. (Previously Presented) A method of conducting a financial transaction using a system including a plurality of different user devices communicating with one or more transaction servers to conduct different types of financial transactions, the different types of financial transactions requiring different information depending upon the type of transaction, comprising:

5 determining a data format for an electronic transaction message between one of a plurality of user devices and a transaction server, the transaction message including at least first and second message segments, each of the message segments having a plurality of data fields, wherein;

the first message segment includes at least one data field for storing data that does not
10 change for different transactions, the data stored in the data field uniquely identifying the user
device from different user devices communicating with the one or more transaction servers;

the second message segment has a variable arrangement of data fields that change for
different financial transactions as a function of the type of financial transaction conducted;

wherein the first message segment includes a data field that identifies the format of the
15 data fields of the second message segment, the format of the second message segment including
data fields for information specific to the type of financial transaction;

encrypting the electronic transaction message with an encryption processor associated
with the user device;

electronically transmitting the transaction message to a transaction router wherein the
20 transaction router receives electronic transaction messages from different ones of the user input
devices, and for each transaction, determines the transaction type and directs the transaction to a
selected one of a plurality of enhanced service processors;

electronically analyzing the electronic transaction message with the transaction router and
forwarding the message to the incoming queue of a selected one of a plurality of enhanced
25 service processors;

retrieving the electronic transaction message from the incoming queue of the selected
enhanced service processor;

determining a trace identification for the electronic transaction message;

accessing a codec module to decrypt at least a portion of the electronic transaction
30 message;

formatting an authorization portion of the electronic transaction message;

determining a time out value for the electronic transaction and associating the time out
value and the trace identification with the electronic transaction message;

forwarding the electronic transaction message to the incoming queue of a selected
35 authorization processor,

retrieving the electronic transaction message from the incoming queue of the selected
authorization processor;

reformatting the electronic transaction message to a selected format required by a

selected one of an authorizing financial network or cash switch;

40 forwarding the reformatted electronic transaction message to the selected one of the authorizing financial network or cash switch;

receiving an authorization response from the selected one of the authorizing financial network or cash switch;

formatting the authorization response from the authorizing financial network or cash
45 switch to the authorization information portion of the electronic transaction message;

verifying the time out value associated with the electronic transaction message and communicating the message to the response queue of the selected one of enhanced service processors;

retrieving the electronic transaction message from the response queue of the selected
50 enhanced service processor, the selected enhanced service processor verifying the authorization response;

formatting a response to the input device;

accessing a codec module to encrypt transaction data in the electronic transaction message;

55 forwarding the response from the enhanced processor to the response queue of the transaction router;

retrieving the response with the transaction router;

forwarding the response to the input device; and

storing a record of the transaction in a database.

26. (Previously Presented) The method of claim 25 wherein the transaction message includes a third message segment, the method further comprising determining a data format for the third message segment and including a data field in the first message segment that identifies the format of the data fields of the third message segment wherein the format of the third message
5 segment includes data fields specific to a good or service selected by the user of the user device.

27. (Previously Presented) The method of claim 25 wherein a data field of the first message segment specifies one of a method of payment selected from a group consisting of ATM card,

credit card, debit card, smart card or cash.

28. (Previously Presented) The method of claim 25 wherein the transaction server communicates with a vendor to provide the good or service identified by the user to complete the financial transaction.

29. (Previously Presented) The method of claim 25 wherein the second message segment includes data fields for authorization information necessary to conduct the financial transaction.

30. (Previously Presented) The method of claim 25 further comprising the step of decrypting the response to the user device with an encryption processor associated with the user device.

31. (Previously Presented) The method of claim 25 further comprising formatting the electronic transaction message into an internal message format of the electronic transaction server after communicating with an inter-process controller to determine a trace identification for the electronic transaction message.

32. (Previously Presented) The method of claim 25 further comprising printing a receipt with the user device and forwarding a completion message to the transaction server.

33. (Previously Presented) The method of claim 32 further comprising storing a record of the transaction in a database after receiving the completion message from the user device.

34. (Previously Presented) A method of conducting a financial transaction using a system including a plurality of different user devices communicating with one or more transaction servers to conduct different types of financial transactions, the different types of financial transactions requiring different information depending upon the type of transaction, comprising:

5 determining a data format for an electronic transaction message between one of a plurality of user devices and a transaction server, the transaction message including at least first

and second message segments, each of the message segments having a plurality of data fields, wherein;

10 the first message segment includes at least one data field for storing data that does not change for different transactions, the data stored in the data field uniquely identifying the user device;

 the second message segment has a variable arrangement of data fields that change for different financial transactions as a function of the type of financial transaction conducted;

15 wherein the first message segment includes a data field that identifies the format of the data fields of the second message segment, the format of the second message segment including data fields for information specific to the type of financial transaction;

 encrypting the electronic transaction message with an encryption processor associated with the user device;

 electronically transmitting the transaction message to a transaction router;

20 electronically analyzing the electronic transaction message with the transaction router and forwarding the message to the incoming queue of a selected one of a plurality of enhanced service processors;

 retrieving the electronic transaction message from the incoming queue of the selected enhanced service processor with the enhanced service processor;

25 communicating with an inter-process controller to determine a trace identification for the electronic transaction message, the trace identification enabling the electronic transaction message to be tracked by the transaction server during the transaction;

 accessing a codec module to decrypt transaction data in the electronic transaction message;

30 formatting an authorization portion of the electronic transaction message;

 determining the identity of a selected one of a plurality of authorization processors and a time out value for the electronic transaction;

 forwarding the electronic transaction message to the incoming queue of the selected authorization processor;

35 retrieving the electronic transaction message from the incoming queue of the selected authorization processor;

reformatting the electronic transaction message to a selected format required by the selected one of an authorizing financial network or cash switch;

forwarding the reformatted electronic transaction message to the selected one of the
40 authorizing financial network or cash switch;

receiving an authorization response from the selected one of the authorizing financial network or cash switch;

formatting the authorization response from the authorizing financial network or cash switch to the authorization information portion of the electronic transaction message;

45 verifying the time out value associated with the electronic transaction message and communicating the electronic transaction message to the response queue of the selected one of enhanced service processors;

retrieving the electronic transaction message from the response queue of the selected enhanced service processor, the selected enhanced service processor verifying the authorization
50 response;

formatting a response to the input device;

accessing the codec module to encrypt transaction data to be forwarded to the input device;

forwarding the response from the enhanced processor to the response queue of the
55 transaction router and recording the electronic transaction in a database;

retrieving the response with the transaction router;

forwarding the response to the input device; and

printing a receipt for the transaction.

35. (Previously Presented) The method of claim 34 further comprising formatting the electronic transaction message to the format of a selected vendor.

36. (Previously Presented) The method of claim 35 further comprising forwarding, with the enhanced service processor, the electronic transaction message to a selected vendor to purchase a good or service.

37. (Previously Presented) The method of claim 34 wherein the first message segment includes a data field for routing information for routing the message in the network.

38. (Previously Presented) The method of claim 34 wherein the second message segment includes data fields for authorization information necessary to conduct the financial transaction.

39. (Previously Presented) The method of claim 34 the method further comprising routing the electronic transaction message to a selected one of the enhanced service processors based on information in a terminal information segment of the electronic message.

40. (Previously Presented) The method of claim 34 further comprising performing a currency exchange rate calculation with the user device.